

## EAST Search History

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|--|---|------------------|---------|------------------|
| S1    | 790  | (502/185).CCLS.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/02/01 09:45 |
| S2    | 366  | ((support or substrate or carrier) same (carbon or carbonaceous)) and ((502/185).CCLS.)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR               | ON      | 2004/09/02 06:58 |
| S3    | 233  | ((support or substrate or carrier) same (carbon or carbonaceous)) and ((502/185).CCLS.) and (platinum or chloroplatinic or chloroplatinate or tetrachloroplatinate)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR               | ON      | 2004/09/02 06:58 |
| S4    | 33   | ((support or substrate or carrier) same (carbon or carbonaceous)) and ((502/185).CCLS.) and (platinum or chloroplatinic or chloroplatinate or tetrachloroplatinate)) and (ruthenium same (nitrate or chloride or sulfate))   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR               | ON      | 2004/09/02 07:00 |
| S5    | 11   | ((support or substrate or carrier) same (carbon or carbonaceous)) and ((502/185).CCLS.) and (platinum or chloroplatinic or chloroplatinate or tetrachloroplatinate)) and (ruthenium same (nitrate or chloride or sulfate)) and ((oxidiz\$3 or oxidat\$3) same (peroxide or oxygen or ozone)) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR               | ON      | 2004/09/02 07:09 |
| S6    | 4    | ((support or substrate or carrier) same (carbon or carbonaceous)) and ((502/185).CCLS.) and (platinum or chloroplatinic or chloroplatinate or tetrachloroplatinate)) and (ruthenium same (nitrate or chloride or sulfate)) and ((oxidiz\$3 or oxidat\$3) adj agent)                          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT           | OR               | ON      | 2004/09/02 07:10 |
| S7    | 3796 | (429/30,33,34,38,39).CCLS.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/09/02 07:11 |

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|     |       |   |   |    |    |                  |
|-----|-------|---|---|----|----|------------------|
| S8  | 229   | ((429/30,33,34,38,39).CCLS.) and (substrate same ((ion adj exchange) or (gas adj diffusion)))   | US-PGPUB; USPAT; EPO; JPO; DERWENT        | OR | ON | 2004/09/02 07:12 |
| S9  | 227   | (((429/30,33,34,38,39).CCLS.) and (substrate same ((ion adj exchange) or (gas adj diffusion)))) and ((fuel adj cell) or electrocataly\$3)   | US-PGPUB; USPAT; EPO; JPO; DERWENT        | OR | ON | 2004/09/02 07:13 |
| S10 | 53    | (((429/30,33,34,38,39).CCLS.) and (substrate same ((ion adj exchange) or (gas adj diffusion)))) and ((fuel adj cell) or electrocataly\$3)) and (carbon near5 (oxidiz\$2 or ozone or peroxide or oxygen))                              | US-PGPUB; USPAT; EPO; JPO; DERWENT        | OR | ON | 2004/09/02 07:14 |
| S11 | 0     | (((429/30,33,34,38,39).CCLS.) and (substrate same ((ion adj exchange) or (gas adj diffusion)))) and ((fuel adj cell) or electrocataly\$3)) and (carbon near5 (nitric or perchloric or chloric or permanganic or chromic))             | US-PGPUB; USPAT; EPO; JPO; DERWENT        | OR | ON | 2004/09/02 07:15 |
| S12 | 12    | (((429/30,33,34,38,39).CCLS.) and (substrate same ((ion adj exchange) or (gas adj diffusion)))) and ((fuel adj cell) or electrocataly\$3)) and (carbon near5 (oxidiz\$2 or ozone or peroxide or oxygen)) and (platinum not ruthenium) | US-PGPUB; USPAT; EPO; JPO; DERWENT        | OR | ON | 2004/09/02 07:15 |
| S13 | 11616 | (platinum or pt) same (ruthenium or ru) same carbon   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:46 |
| S14 | 584   | S13 and ((platinum or pt) same (sulfite or tetrachloroplatinate or phosphine))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:47 |
| S15 | 1249  | S13 and ((platinum or pt) same (sulfite or tetrachloroplatinate or chloroplatinic or phosphine))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:47 |
| S16 | 592   | S15 and ((ruthenium or ru) same (chloride or "nitrosyl nitrate" or "nitrosyl sulfate"))   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:48 |

## EAST Search History

|     |     |  |   |    |    |                  |
|-----|-----|--|---|----|----|------------------|
| S17 | 161 | S16 and ((oxidizing or oxidant) same (peroxide or oxygen or ozone))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:53 |
| S18 | 44  | S17 and ((oxidizing or oxidant) same (acid\$2 with (perchloric or nitric or chloric or permanganic or chromic)))                         | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:53 |
| S19 | 23  | S18 and electrocatalyst  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:52 |
| S20 | 14  | S19 and (gdl or "gas diffusion layer" or "gas diffusion backing" or "ion exchange" or "perfluorinated sulfonic" or perfluro\$1sulfonic)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 09:54 |
| S21 | 378 | (platinum or pt) same (oxidizing or oxidized or oxidant) same carbon same (precipitating or precipitant or precipitation or precipitate) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:41 |
| S22 | 115 | S21 and (ruthenium or ru)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:43 |
| S23 | 24  | S22 and ((platinum or pt) same (chloroplatinic or sulfite or tetrachloroplatinate))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:44 |
| S24 | 15  | S23 and ((ruthenium or ru) same ("nitrosyl nitrate" or "nitrosyl sulfate" or chloride))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:45 |
| S25 | 244 | (platinum or pt) same (oxidizing or oxidant) same carbon same (precipitating or precipitant or precipitation or precipitate)             | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:41 |
| S26 | 84  | S25 and (ruthenium or ru)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:44 |

## EAST Search History

|     |     |  |   |    |    |                  |
|-----|-----|--|---|----|----|------------------|
| S27 | 22  | S26 and ((platinum or pt) same (chloroplatinic or sulfite or tetrachloroplatinate))                              | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:44 |
| S28 | 14  | S27 and ((ruthenium or ru) same ("nitrosyl nitrate" or "nitrosyl sulfate" or chloride))                          | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:52 |
| S29 | 156 | S25 and ((oxidizing or oxidant) same (peroxide or oxygen or ozone))  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:53 |
| S30 | 47  | S29 and ((oxidizing or oxidant) same (acid\$2 with (perchloric or nitric or chloric or permanganic or chromic))) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT | OR | ON | 2007/02/01 13:54 |